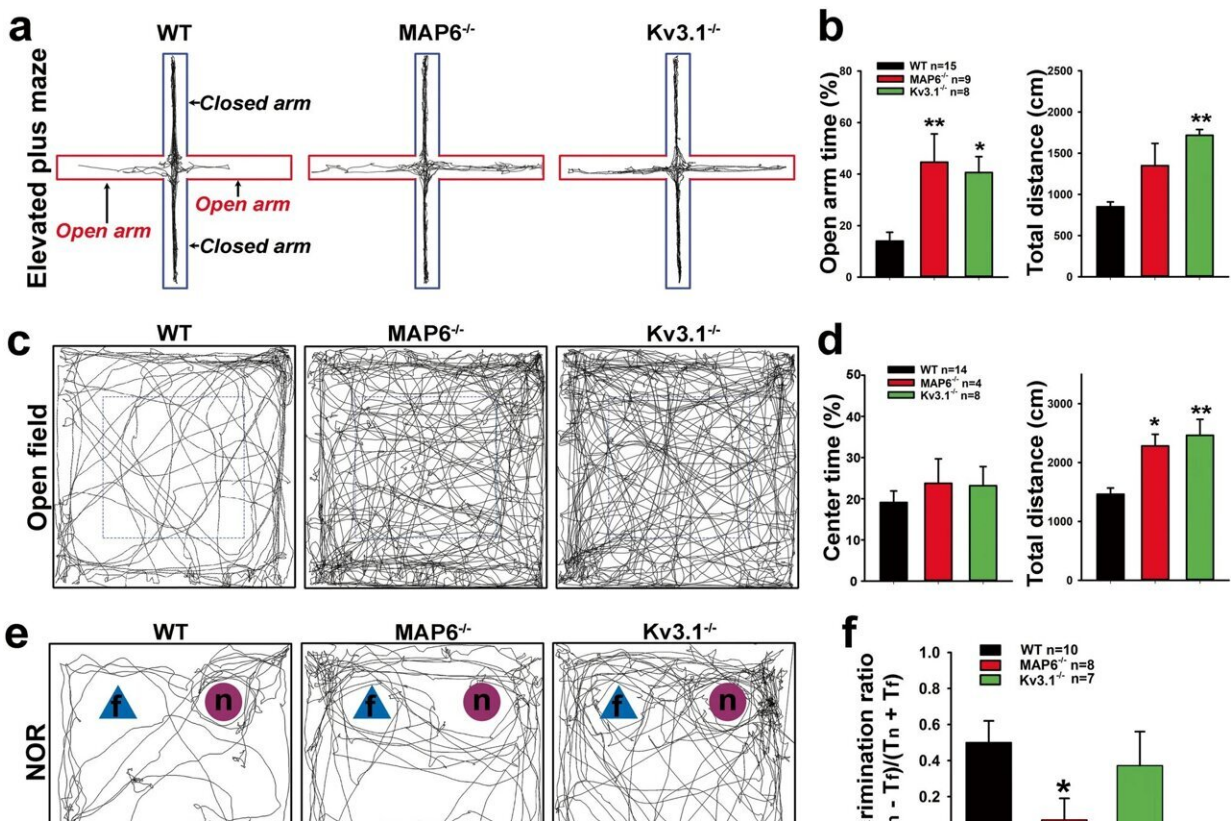


# Unexpected link found between 2 schizophrenia risk proteins

October 26 2023, by Emily Caldwell



Behavioral alterations in MAP6<sup>-/-</sup> and Kv3.1<sup>-/-</sup> mice. Adult (3–6 months old) WT B6 (black bars), MAP6<sup>-/-</sup> (red bars), and Kv3.1<sup>-/-</sup> (green bars) mice were used in a series of behavioral assays. Each group contained approximately half male and half female mice. **a** Example traces in the elevated plus maze (EPM) with open arms indicated in red and closed arms in dark blue. **b** Summaries of open arm time ( $100 \times T_{\text{Open}} / (T_{\text{Open}} + T_{\text{Closed}})$ ); WT control, MAP6<sup>-/-</sup>  $p = 0.001$ , Kv3.1<sup>-/-</sup>  $p = 0.029$ ) (left) and total travel distance (cm; WT control, MAP6<sup>-/-</sup>  $p = 0.088$ , Kv3.1<sup>-/-</sup>  $p = 0.003$ ) (right) in EPM. **c** Example traces in the open field test

with blue dashed lines to indicate the center. **d** Summaries of the center time percentage ( $100 \times T_{\text{Center}}/T_{\text{Total}}$ ; Overall  $p = 0.595$ )(left) and the total travel distance (cm; WT control,  $\text{MAP6}^{-/-}$   $p = 0.045$ ,  $\text{Kv3.1}^{-/-}$   $p = 0.002$ )(right) in the open field test. **e** Example traces in the novel object recognition (NOR) test with the blue triangles as the familiar objects (**f**) and the red circles as the novel objects (**n**). **f** Summary of the discrimination ratio,  $(T_n - T_f)/(T_n + T_f)$ . WT control,  $\text{MAP6}^{-/-}$   $p = 0.044$ ,  $\text{Kv3.1}^{-/-}$   $p = 0.096$ . **g** Summary of the rotarod test. In trial #3,  $\text{MAP6}^{-/-}$   $p = 0.041$ . In trial #4,  $\text{MAP6}^{-/-}$   $p = 0.001$ . **h** Summary of the balance beam test. **i** Summary of spontaneous alternation in the Y maze test (overall  $p = 0.801$ ). Each result is provided as mean  $\pm$  SEM. Mouse numbers are provided in the figure. One-Way ANOVA followed by Dunnett's test: \*,  $p$

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